

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (previously amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 13-16. Please AMEND claims 1, 12 and 17 in accordance with the following:

1. (currently amended) A signature creating apparatus which creates and connects a digital signature, said signature creating apparatus comprising:

a clock in which time information is set only by aan external time authentication authority;

an ID storing unit which stores an apparatus ID for specifying the creating apparatus using a data form capable of preventing interpolation;

a personal identification storing unit which stores personal identification information for specifying a person who has a proper right to update stored contents;

a first connecting unit which creates connection data by connecting plain-text, the time information, the apparatus ID, and the personal identification information that identifies a person using the creating apparatus ~~to create the digital signature; and~~ in a predetermined order;

a signature creating unit which creates the digital signature using the connection data created by said first connecting unit and a key used only for creating a digital signature; and

a second connecting unit which creates signed data by connecting the digital signature with the connection data,

wherein the personal identification information is stored within the signature creating apparatus using a data form capable of preventing interpolation, and the signature creating unit encrypts the connection ~~dated~~data to create the digital signature, ~~and connects the digital signature to the time information, the apparatus ID, and the personal identification information to create a~~ second connecting unit outputs the signal data to be transmitted to aan external network.

2. (cancelled)

3. (previously presented) The signature creating apparatus according to claim 1, further comprising:

a storage unit which stores the personal identification information;

a judging unit which judges as to whether or not a person who updates stored contents of said storage unit is a person who has proper right; and

an updating unit which updates the stored contents of said storage unit only when said judging unit has judged that the person who updates is the person who has proper right.

4. (original) The signature creating apparatus according to claim 1 comprises an unrewritable storage unit in which the apparatus ID is stored.

5. (original) The signature creating apparatus according to claim 1, further comprises a confirming unit which confirms a working state of said clock,

wherein said signature creating unit creates the digital signature only when said confirming unit confirms that said clock works normally.

6. (previously presented) The signature creating apparatus according to claim 5, wherein said signature creating unit stops using the key used only for creating the signature when said confirming unit confirms that said clock does not work normally, and creates an alternate digital signature using connected information which does not include the time information and using a key other than the key used only for creating the signature.

7. (original) The signature creating apparatus according to claim 5, wherein said confirming unit confirms the working state of said clock based on a result of comparing a driving voltage of said clock with a threshold.

8. (original) The signature creating apparatus according to claim 5, wherein said confirming unit confirms the working state of said clock based on a result of comparing a time-counted result of said clock before certain time and a time-counted result at current time.

9. (original) The signature creating apparatus according to claim 5, wherein said confirming unit brings a flag into ON state when said clock works normally, and brings the flag into OFF state when said clock does not work normally; and

wherein said signature creating unit creates the digital signature only when the flag is ON state.

10. (original) The signature creating apparatus according to claim 1, further comprising a setting unit which sets the time information according to a time setting request, said setting unit being installed in the time authentication authority.

11. (original) The signature creating apparatus according to claim 1, further comprising a

correcting unit which corrects said clock automatically, said correcting unit being installed in the time authentication authority.

12. (currently amended) A signature creating apparatus which creates and connects a digital signature using a common key method, said signature creating apparatus comprising:

an ID storing unit which stores an apparatus ID for specifying the creating apparatus using a data form capable of preventing interpolation;

a personal identification storing unit which stores personal identification information for specifying a person who has a proper right to update stored contents;

a first connecting unit which creates connection data by connecting the apparatus ID, plain-text, ~~the personal identification information that identifies a person using the creating apparatus to create the digital signature~~, and time information in a predetermined order; and

a signature creating unit which creates the digital signature using the connection data created by said first connecting unit and a common key used only for creating a digital signature creating; and

a second connecting unit which creates signed data by connecting the digital signature with the connection data,

wherein the personal identification information is stored within the signature creating apparatus using a data form capable of preventing interpolation, and the signature creating unit encrypts the connection data to create the digital signature, and ~~connects the digital signature to the time information, the apparatus ID, and the personal identification information to create a the~~ second connecting unit outputs the signed data to be transmitted to an external network.

13-16. (cancelled)

17. (currently amended) A digital signature creating apparatus comprising:

a clock which creates time information;

an ID storing unit which stores an apparatus ID for specifying the creating apparatus using a data form capable of preventing interpolation;

a personal identification storing unit which stores personal identification information for specifying a person who has a proper right to update stored contents, the apparatus ID and the personal identification information being stored in a data form capable of preventing interpolation;

a first connecting unit which creates connection data by connecting plain-text, the time information, the apparatus ID, and the personal identification information that identifies a person using the creating apparatus ~~to create a digital signature~~ in a predetermined order;

a signature creating unit which creates the digital signature using the connection data

created by said first connecting unit and a key used only for creating a digital signature; and
a ~~signal creation~~second connecting unit which ~~connects~~creates signed data by connecting
the digital signature to the ~~time information, the apparatus ID, and the personal identification~~
~~information to create signal~~connection data created by the first connecting unit, the signed data to
~~be~~being transmitted to an external network as signal data.